

Facts about Whooping Cough



*Jasjit Singh, MD,
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Pediatric Infectious
Diseases at CHOC
Children's, recently gave
a presentation to the
Children and Families
Commission on the
alarming increase in
reported cases of Pertussis,
better known as
whooping cough, which
can be fatal to infants.
She answers a few key
questions for parents
about "the cough that kills."*



What causes whooping cough and how does it spread?

Whooping cough (Pertussis) is caused by a highly contagious bacteria, and is spread through the air by infectious droplets.

What are the symptoms of whooping cough?

Pertussis disease can be divided into three stages:

First stage: can last 1–2 weeks and includes a runny nose, sneezing, low-grade fever, and a mild cough (all similar symptoms to the common cold).

Second stage: lasts 1–6 weeks, but can persist for up to 10 weeks. The characteristic symptom is a burst, or paroxysm, of numerous, rapid coughs. At the end of the paroxysm, the patient suffers from a long inhaling effort that is characterized by a high pitched whoop (hence the name, "whooping cough"). Infants and young children often appear very ill and distressed, and vomit after a paroxysm, but often don't whoop. They may stop breathing, turn blue, or have seizures from lack of oxygen.

Third stage: usually lasts 2–6 weeks, but may last for months. Although the cough usually improves after 2–3 weeks, paroxysms may recur whenever the patient suffers any subsequent respiratory infection. The disease is usually milder in adolescents and adults, consisting of a persistent cough similar to that found in other upper respiratory infections. However, these individuals are still able to transmit the disease to others, including unimmunized or incompletely immunized infants.

How serious is whooping cough?

Pertussis can be a very serious disease, especially for infants. Rates of hospitalization and complications increase with decreasing age. During the two-year period 2004–05, a total of 66 deaths from pertussis were reported to Centers for Disease Control and Prevention (CDC). Children age 3 months and younger accounted for 85% of these deaths.

Although adults are less likely than infants to become seriously ill with pertussis, most make repeated visits for medical care and miss work, especially when pertussis is not initially considered as a reason for their long-term cough. In addition, adults with pertussis infection have been shown to be an important source of infection to infants with whom they have close contact.

What can we do to prevent young babies from getting whooping cough?

Protection against whooping cough wears off approximately five to 10 years after completion of childhood vaccination, leaving adolescents and adults susceptible to whooping cough. Since 2005, an adult vaccine (Tdap) has been available to boost waning immunity. The CDC recommends all adolescents receive this vaccine at age 11–12 years, and all adults who are in contact with children less than 12 months of age. Since about half of infants who become infected with whooping cough get it from parents, Dr. Singh recommends parents and caregivers get vaccinated preferably before or right around birth. It is particularly important to vaccinate new mothers in the immediate post-partum period.

Vaccinating contacts of a baby too young to be immunized is known as a "cocoon" vaccination strategy. An interval as short as two years from the last Td dose is suggested.

Is there a treatment for Whooping Cough?

Antibiotics are helpful in preventing further transmission of pertussis. The drug of choice is usually azithromycin that is given to all household and other close contacts of the patient to minimize transmission, regardless of age and vaccination status. All close contacts younger than seven years of age should complete their DTaP vaccine series if they have not already done so.